

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
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URS (NMI) REUTELER ET AL. : Confirmation No.: 5960  
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Serial No.: 10/532,528 : Group Art Unit: 3721  
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National Stage of PCT/US03/034067 : Examiner Christopher Harmon  
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Filed: October 7, 2005 :  
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For: **CARTON FEEDING AND FORMING MACHINE WITH SELECTIVELY  
ACTUATED LUGS AND RELATED METHODS**

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief follows the Examiner's Answer mailed February 25, 2009, and addresses the Examiner's remarks made in response to Appellant's Appeal Brief.

Regarding the rejection of claims 109 and 111-112 under 35 U.S.C. § 112, second paragraph, as being indefinite, the Examiner now alleges that "there is nothing described in that conveys a product along the second portion of the support surface (perpendicular to first portion in L-shape) to the second end of the first portion as claimed." *Examiner's Answer*, p. 4 (emphasis in original). The actual claim requires "means for conveying the carton to the second end of the first portion of the support surface along the second portion of the support surface." Consistent with the specification, the "means" conveys the carton once delivered

“to” the second end of the first portion along the second portion of the support surface.

Although the Examiner did not raise any issue with regard to this precise language in a prior Action, Appellant attempted to present this limitation in better form for purposes of appeal by filing an Amendment After Final filed on December 8, 2008, which was subsequent to the Notice of Appeal, but prior to the filing of the Appeal Brief. However, the Examiner refused entry of this amendment. Accordingly, should the Board entertain the Examiner’s position made for the first time in the Answer, Appellant respectfully requests the Board exercise its discretion and enter the amendments to claim 109 under 37 CFR § 41.33 and MPEP § 1206 to obviate the issue during this appeal. *See* 37 CFR § 41.33 (“Amendments filed after the date of filing an appeal pursuant to §§ 41.31(a)(1) through (a)(3) and prior to the date a brief is filed pursuant to §§ 41.37 may be admitted as provided in §§ 1.116 of this title.”); MPEP § 1206 (“Amendments filed after the filing of a notice of appeal, but prior to the date of filing a brief, may be admitted . . . to . . . present rejected claims in better form for consideration on appeal . . .”).

Turning to the substantive rejections, the Examiner in his Answer attempts to bolster the rejection of claims 109 and 112 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,187,482 to Steele (“Steele”), arguing that “conveyor h is an overhead conveyor which at least partially overlies a second portion of the path along a second portion of the support surface.” *Examiner’s Answer*, p. 8. Even if this is true, and Appellant contends that it is not, Steele does not disclose a “means for conveying the carton along the first portion of the support surface” that is “at least partially overlying the second portion of the support surface” as the claim expressly requires. In fact, the Examiner has made no findings at all as to the structure disclosed in the specification corresponding to the “means for conveying the carton along the first portion of the support surface,” as required by Office procedure. *See* MPEP § 2181 (“the ‘broadest reasonable interpretation’ that an examiner may give

means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO *may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.*") (emphasis added). If the prior art does not perform the identical function recited, or does so using non-identical or non-equivalent structures, then a proper rejection cannot lie. *McGinley v. Franklin Sports Inc.*, 60 USPQ2d 1001 (Fed. Cir. 2001). As a *prima facie* case of anticipation has not been set forth based on a proper interpretation of these claims, reversal of the rejection of claims 109 and 112 is in order.

Regarding the rejection of claims 1-6, 9, 106-108, 111, and 113 as obvious under 35 U.S.C. § 103(a) in view of Steele, Appellant maintains that Steele makes absolutely no mention of the claimed overhead conveyor (which is expressly admitted by the Examiner). Further, the record is void of any reason as to why such an overhead conveyor would be used in the Steele arrangement. Therefore, a *prima facie* case of obviousness is lacking.

In addition, claim 2 requires that the first lug of the overhead conveyor is *pivotally mounted* to a conveyor chain for moving between *a retracted position overlying a portion of the support surface* and the depending position. Steele makes no mention of any "pivotally mounted" lugs, and the Examiner does not contend otherwise or supply any reason for providing such in the Steele arrangement. Accordingly, reversal of the rejection of claim 2 is in order.

Further, claim 3 requires that a "second lug" is pivotally mounted to each of a pair of conveyor chains. Again, Steele makes no mention of any "pivotally mounted" lugs, much less of a "second lug" pivotally mounted to each of a pair of conveyor chains. Therefore, a *prima facie* case of obviousness is lacking, and reversal of the rejection of claim 3 is in order.

Claim 4 requires that "each second lug" of claim 4 is "a pop-up lug movable between a retracted position below the conveying path and an upstanding position." No lugs

associated with the allegedly “parallel” chains in Steele “pop-up” between a retracted position “below the conveying path” and an upstanding position. Thus, a *prima facie* case of obviousness is lacking with respect to claim 4 as well.

Regarding claim 5, no reason is provided as to why it would be “obvious” to use the claimed rotatable wheel in the claimed arrangement. Hence, a *prima facie* case of obviousness has not been established, and reversal of the rejection of claim 5 is also in order.

Claim 106 requires that “a portion of the overhead conveyor overlies a portion of the takeaway conveyor.” Appellant again notes that Steele does not disclose the claimed overhead conveyor, and no reason is provided for further modifying the reference to arrive at the invention of claim 106. Accordingly, the rejection cannot be sustained.

Claim 107 requires not only the “overhead conveyor,” but also that the lugs it carries are “for selectively pivoting relative to the first endless chain from a retracted position to a depending position for engaging and conveying the carton along the first leg of the L-shaped path.” Again, however, Steele makes absolutely no mention of the claimed overhead conveyor (which is expressly admitted by the Examiner), much less the claimed overhead conveyor having the claimed pivoting lugs. Therefore, a *prima facie* case of obviousness is lacking with respect to this claim and claim 108 depending from it (which further requires that the overhead conveyor overlie a portion of an orthogonal support surface, which is in no way disclosed, taught, or suggested by the Steele reference).

Claim 113 recites the overhead and takeaway conveyor configuration, including a first folder for folding a first flap of the carton while conveyed by the overhead conveyor and a second folder for folding a second flap of the carton while conveyed by the takeaway conveyor. However, Steele fails to mention the claimed overhead conveyor in any way, much less the claimed overhead conveyor associated with any folder whatsoever. Accordingly, the Examiner has not set forth a proper basis for rejecting claim 113 as obvious

in view of Steele or any other substantial evidence in the record.

With respect to the rejection of claims 1-6, 9, 106-108, 111 and 113 as being obvious under 35 U.S.C. § 103(a) in view of Steele and U.S. Patent No. 5,501,318 to Disrud ("Disrud"), the Examiner now argues that it would have been obvious to the skilled artisan "to include the overhead conveyance system of Disrud in the invention to Steele for providing the cartons along the first portion of the surface for supporting the carton." *Examiner's Answer*, p. 6. Furthermore, it is alleged that "[v]arious reasons exist for using conveyors of differing types including the type of carton hopper used ie. top load, bottom load, etc., speed of the conveyor desired, weight of the carton, etc." and that "[o]ne of ordinary skill in the art would look to other types of conveyors to transport the cartons to the transfer point." *Examiner's Answer*, p. 9.

Aside from lacking any support in terms of substantial evidence, the Examiner's position of obviousness in view of Steele and Disrud appears to be nothing more than the cautioned-against selective culling from references in an attempt to meet the requirements of the claims. "This form of hindsight reasoning, using the invention as a roadmap to find its prior components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention." *Ruiz v. A.B. Chance Co.*, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). Indeed, the U.S. Supreme Court recently recognized the problems associated with such reasoning, observing that "[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398; 127 S. Ct. 1727, 167 L. Ed. 2d 705 (U.S. 2007).

As observed in the Appeal Brief, nothing in the cited prior art discloses or even remotely provides a reason to arrive at the inventions of claims 1-6, 9, 106-108, 111 and 113. In particular, Steele makes absolutely no mention of the claimed overhead conveyor, as is

expressly admitted by the Examiner, and the Examiner fails to supply any proper reason as to why such an overhead conveyor would be used in the Steele arrangement. Rather, it allegedly would be obvious to provide such an overhead conveyor “for supporting the carton.” *Examiner’s Answer*, p. 4. However, this is a mere conclusory statement, and not the articulated reasoning for combining teachings based on a rational underpinning necessary to sustain a proper obviousness rejection. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. at 1741 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)). Thus, the Examiner has failed to establish any reason as to why a skilled artisan would modify or combine the teachings of the Steele and Disrud references to arrive at the claimed inventions. Accordingly, a *prima facie* case of obviousness is lacking with respect to claims 1-6, 9, 106-108, 111 and 113, and reversal of the rejections is in order.

In addition, claim 4 requires that “each second lug” is “a pop-up lug movable between a retracted position *below* the conveying path and an upstanding position” (emphasis added). This structure is not shown anywhere in Steele or Disrud. In fact, Disrud discloses exactly the opposite of what is claimed. The Examiner does not contend otherwise, or explain why the claimed invention would be obvious. Therefore, the rejection of the invention of claim 4 should not be sustained.

Claim 106 requires that “a portion of the overhead conveyor *overlies* a portion of the takeaway conveyor,” which is for conveying cartons in a second, perpendicular direction. Again, Steele fails to disclose the claimed overhead conveyor, and no reason with a rational underpinning is articulated for further modifying the reference to arrive at the invention of claim 106. In fact, Steele could not even accommodate an overhead conveyor in the claimed manner as the second conveyor “I” already includes an aligned, overhead conveyor “h.” The

conveyor “h” would thus prevent the proposed modification, and removing this conveyor would render the arrangement of Steele unsatisfactory for its intended purpose (which is inimical to a finding of obviousness; *see* MPEP §2143.01 (“The proposed modification cannot render the prior art unsatisfactory for its intended purpose”)). Disrud does not disclose any overhead conveyor that overlies a portion of an takeaway conveyor for conveying in a second direction, either. Therefore, the combined teachings of the references cannot possibly lead a skilled artisan to the claimed invention, and reversal of the rejection of claim 106 as obvious is in order.

Claim 107 requires not only the “overhead conveyor,” but also that the lugs it carries are “for selectively pivoting relative to the first endless chain from a retracted position to a depending position for engaging and conveying the carton along the first leg of the L-shaped path.” The claim further requires lugs attached a second endless chain for selectively pivoting relative to the second endless chain from a retracted position to an upstanding position for engaging and conveying the carton. Neither Steele nor Disrud, whether considered alone or in combination, even remotely contemplate this claimed approach to a machine for effecting carton folding and forming. Again, Steele makes absolutely no mention of the claimed overhead conveyor, as is expressly admitted by the Examiner, much less the claimed overhead conveyor having the claimed pivoting lugs. Indeed, Steele actually requires a feeder plate *f* for transferring the cartons in timed relation to the corresponding conveyor *h* (see col. 5, lines 54-58, “when a lugged link of the conveyor belt approaches its position to pick up a carton from the dead plate *g* the pusher plate will be advanced to push a carton into the proper position”), which structure Appellant’s invention completely avoids with pivoting lugs that can be selectively actuated to sweep the carton away (or left in a retracted position so as to not interfere with the carton). Disrud does not disclose, teach, or even remotely mention conveying in orthogonal directions, much less overhead and takeaway

conveyors with selectively actuated lugs capable of working in concert to facilitate a remarkable increase in throughput in a carton forming and feeding machine. Therefore, a *prima facie* case of obviousness is lacking with respect to this claim and claim 108 depending from it.

Claim 113 recites the overhead and takeaway conveyor configuration, including a first folder for folding a first flap of the carton while conveyed by the overhead conveyor and a second folder for folding a second flap of the carton while conveyed by the takeaway conveyor. Not only does Steele fail to mention the claimed overhead conveyor in any way, Steele does not mention the claimed overhead conveyor associated with any folder whatsoever. Further, the Examiner does not identify this structure in Disrud, or otherwise explain why it supplies the missing teaching that would render the invention of claim 113 obvious. Reversal of the rejection of claim 113 is thus appropriate.

Regarding the rejection of claims 4 and 107-108 as obvious under 35 U.S.C. § 103(a) in view of Steele and U.S. Patent No. 5,638,659 to Moncrief et al. ("Moncrief"), the Examiner now argues that "one of ordinary skill in the art would easily recognize the use of the control system actuators of Moncrief et al. for increased performance for transportation of the cartons in the invention to Steele et al." *Examiner's Answer*, p. 9. According to the Answer, "[t]he lug actuator system would allow for a 'smart' automated system wherein the lugs would be controlled by the actuators for various reasons including predictable events that might occur such as a carton jam, missing/damaged lug on one conveyor but not the other, etc." *Examiner's Answer*, pp. 9-10.

Aside from lacking any support in terms of substantial evidence, the Examiner's position of obviousness in view of Steele and Moncrief again appears to be the cautioned-against selective culling from references in an attempt to meet the requirements of the claims. See, e.g., *Ruiz v. A.B. Chance Co.*, 69 USPQ2d at 1690 ("This form of hindsight reasoning,



using the invention as a roadmap to find its prior components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention.”).

Further, nothing in Steele or Moncrief discloses or even remotely provides a reason to arrive at the inventions of claims 4 and 107-108. Rather, it would allegedly be obvious to combine the teachings of Steele and Moncrief “for increased performance for transportation of the cartons.” *Examiner’s Answer*, p. 9. However, this is a mere conclusory statement, and not the articulated reasoning for combining teachings based on a rational underpinning necessary to sustain a proper obviousness rejection. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. at 1741 (citing *In re Kahn*, 441 F.3d at 988). Thus, the Examiner has failed to establish any reason as to why a skilled artisan would modify or combine the teachings of the Steele and Moncrief references to arrive at the claimed inventions. Accordingly, a *prima facie* case of obviousness is lacking with respect to claims 4 and 107-108, and reversal of the rejection is in order.

The Examiner’s position also ignores the fact that claim 4 (by virtue of its dependency on claim 1) and claims 107-108 require lugs capable of “selectively pivoting . . . from a retracted position to a depending position” for engaging the carton. Neither Steele nor Moncrief even remotely describe lugs that are in a *depending* position for engaging and conveying anything. In addition, claim 108 requires that “the overhead conveyor at least partially overlies the second portion of the support surface,” which is orthogonal to a first portion, a feature found in neither of the cited references or otherwise (and, in fact, contraindicated by the teachings of Steele). Accordingly, there is no substantial evidence in the record supporting the rejection of claims 4 and 107-108 based on the Steele and Moncrief references, and reversal of the rejection is in order.

The Examiner’s reliance on *In re Japikse*, 181 F.2d 1019, 37 CCPA. 1026, 1950

CCPA LEXIS 67, 1950 Dec. Comm'r Pat. 336, 86 U.S.P.Q. (BNA) 70 (CCPA 1950), in support of the rejections based on obviousness is clearly inappropriate. First of all, this decision issued in 1950. This is before the passage of the 1952 Patent Act, which is the first time the concept of "obviousness" was defined by statute as it is now.

Secondly, *Japikse* issued sixteen 16 years before the seminal decision in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (U.S. 1966), the viability of which was recently affirmed in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (U.S. 2007). In *Graham*, the Court eschewed a bright line test of obviousness, stating:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

According to the Manual of Patent Examining Procedure, at Section 2141, "Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103." Hence, the Examiner's reliance on *Japikse* for a *per se* rule of obviousness is improper.

Finally, Appellant respectfully rejects the Examiner's statement that "[p]resenting known conveyors for transporting cartions [*sic* cartons] in an overlying relationship is not considered a novel concept." *Examiner's Answer*, p. 10. Appellant submits that no single reference cited by the Examiner discloses this arrangement of structures, as discussed above.

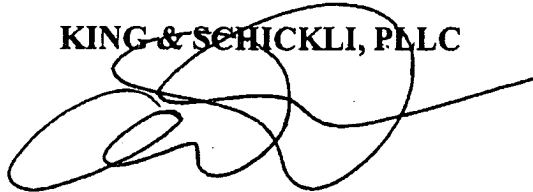
In summary, the Appellant has addressed and overcome every rejection made by the Examiner. Upon careful review of the cited references in light of the comments made in the Appeal Brief and this Reply Brief, it is believed that the Board will agree that all of the

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April 24, 2009

presently pending claims should be allowed. Accordingly, it is respectfully requested that the rejections of the Examiner be reversed and that the present application be remanded for allowance. Although the Appellant believes that no fees are due, the undersigned authorizes the deduction of any necessary fee from Deposit Acct. No. 11-0978.

Respectfully submitted,

**KING & SCHICKLI, PLLC**

A handwritten signature in black ink, appearing to read 'Andrew D. Dorisio', is written over the firm name 'KING & SCHICKLI, PLLC'.

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